Remarks

By the foregoing amendment the specification has been amended to correct a typographical error. The metal cerium (IV) and a ligand has been deleted from claim 1. Claim 1 has also been amended to correct the typographical error Terbium (IV) to Terbium (III). Claim 8 has been amended to recite the electroluminescent compound. In addition claim 23 has been amended to correct a typographical error. This amendment is supported by the original claims, and page 8, first full paragraph line 20-21, line 25 of the specification. It is respectfully requested that this amendment be entered as it does not constitute new matter.

The disclosure has been objected to because it is unclear as to whether or not the electron injecting material is between the cathode and the electroluminescent material layer as specified on page 5, or between the anode and electroluminescent layer as stated on page 6. As noted above, and as would be recognized to be the case by one skilled in the art, the specification has been corrected to state the electron injecting material is between the cathode and electroluminescent material.

Claims 1, 6, 8-9, 11-14, 16-21 and 23-27 have been rejected under 35 U.S.C. §112, second paragraph. More particularly, claim 1 is alleged to be indefinite because it is missing the formulas for which the group is selected from for the ligand and claim 23 refers to the anode but is dependent on claim 8 that refers to the cathode.

As noted above claim 23 has been amended to refer to the cathode. With respect to the ligand formulas of claim 1, the Examiner's attention is respectfully invited to the Letter filed May 15, 2001 enclosing a corrected version of claim 1 including the ligand structures.

Claims 1 and 6 have been rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,834,053 to Dye et al.. More particularly, the Office Action alleges that Dye

et al. discloses a blue emitting material comprised of a tris-tetramethyl heptandionate (TMHD) ligand and a metal such as cerium, europium or terbium.

In this regard it is respectfully submitted there is no disclosure of a blue emitting material compound of cerium (III) europium or terbium with TMHD in Dye et al..

Dye et al. discloses the use of precursor compounds ($Ga(TMHD)_3$, $Ca(TMHD)_2$, Ce(IV) $(TMHD)_4$, $Ba(TMHD)_2$ and $Sr(TMHD)_2$ which can be deposited in an atmosphere of H_2S to prepare thiogallate phosphors. Moreover, at column 4, lines 53-55 Dye et al teaches europium dopants can be used for a green emission, not blue.

Accordingly, there is no teaching or suggestion of the electroluminescent compounds of claim 1 and claim 6 in Dye et al..

Claims 1, 8-9, 11-14, 16-21 and 23-27 have been rejected under 35 U.S.C. §103 as being unpatentable over Hu et al. U.S. Patent No. 5,923,363 in view of U.S. Patent No. 6,025,677 to Moss, III et al.. There is no teaching or suggestion in any of these references of the electroluminescent compound which emits light in the blue or purplish blue spectrum when an electric current is passed through it as recited in the claim invention.

As admitted by the Examiner Hu fails to teach or suggest the electroluminescent compound of the claimed invention. To cure the deficiencies of Hu, the Examiner relied on Moss, III. This reliance is misplaced. Like, Dye et al. Moss, III teaches thiogullate phosphors and does not disclose or teach the compounds of the claimed invention.

Claims 1, 8 and 24 have been rejected under 35 U.S.C. §103(a) as unpatentable over U.S. Patent No. 6,074,734 to Kawamura in view of Moss, III et al.. Like Moss, III Kawamura fails to teach or suggest the electroluminescent compounds of the claimed invention.

In view of the foregoing claims 1, 6-9, 11-14, 16-21 and 23-27 are in proper form and in condition for allowance.

Prompt and favorable action is respectfully requested.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned **"Version with markings to show changes made."**

Respectfully submitted,

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Version With Markings To Show Changes Made

In the Specification

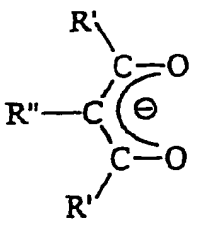
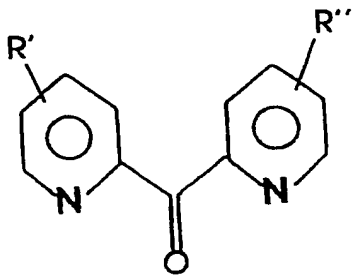
Please amend page 5, lines 29 and 30 and page 6, lines 1-3 to read as follows:

In a preferred structure there is a substrate formed of a transparent conductive material which is the anode on which is successively deposited a hole transportation layer, the electroluminescent material layer and an electron injection layer which is connected to the [anode] cathode. The [anode] cathode can be any low work function metal e.g. aluminum, calcium, lithium, silver/magnesium alloys, etc.

In the Claims

1. (Twice Amended) An electroluminescent compound which comprises an organic complex of a metal and an organic ligand which emits light in the blue or purplish blue spectrum when an electric current is passed through it

wherein the metal is selected from the group consisting of thorium (IV), yttrium (III), gadolinium (III), europium (II), terbium [(IV)] (III), [cerium (IV),] cerium (III) and mixtures thereof and the ligand is selected from the group consisting of

(i)  and []

where R' maybe the same or different parts of the molecule and each of R" and R' is a substituted or unsubstituted aromatic or heterocyclic ring structure or a hydrocarbyl or a fluorocarbon or R" is fluorine or hydrogen or R" is copolymerised with a monomer or [R' is t-butyl and R" is hydrogen] R" is an alkyl group optionally a $-C(CH_3)$ group;

(ii) TMHD;

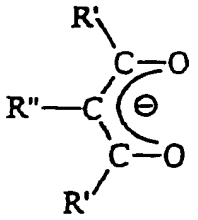
(iii) α' α", α'" tripyridyl;

(iv) bathophen (4, 7-diphenyl-1, 10-pehnanthroline);

(v) crown ethers, and

(vi) cryptands.

8. (Twice Amended) An electroluminescent device which comprises (i) a transparent substrate (ii) an electroluminescent layer an electroluminescent compound which comprises an organic complex of a metal selected from transition metals, lanthanides and actinides and an organic ligand which eletroluminescent compound emits light in the blue or purplish blue spectrum when an electric current is passed through it and in which the organic ligand has the formula



where R' maybe the same or different at different parts of the molecule and each of R" and R' is a substituted or unsubstituted aromatic or heterocyclic ring structure or a hydrocarbyl or a

fluorocarbon or R" is fluorine or hydrogen or R" is copolymerised with a monomer is an alkyl group optionally a $-C(CH_3)$ group, or the ligand is selected from TMHD, α', α", α'" tripyridyl bathophen (4, 7-diphenyl-1, 10-phenanthroline), crown ethers and cryptands comprising an electroluminescent compound [as claimed in claim 1] deposited on the substrate and (iii) a cathode.

23. (Twice Amended) An electroluminescent device as claimed in claim 8 in which the cathode [anode] includes one selected from the group consisting of aluminum, magnesium, lithium, calcium and magnesium silver alloy.